

In the Claims:

1. (currently amended) A low profile antenna, comprising:

A fractal pattern antenna being generally planar in configuration and extending in a first direction; and

a ground plane structure operatively associated with the antenna, the ground plane structure comprising:

a generally planar surface that extends in a direction that is generally parallel to the first direction;

at least one protrusion extending from the planar surface; and

a dielectric substrate supported by the planar surface, the dielectric substrate comprising a ferrimagnetic material that has a relative permeability (μ) of greater than or equal to about one and a relative permittivity (ϵ) of greater than or equal to about one.

2. (original) The antenna of claim 1, wherein the at least one protrusion comprises:

a plurality of pedestals; and

a plurality of posts interconnecting each of the pedestals and the planar surface;

wherein the dielectric substrate extends between the planar surface and the pedestals.

3. (original) The antenna of claim 2, wherein:

the plurality of pedestals are disposed about the antenna;

the antenna extends in a direction that is generally parallel to that of the planar surface; and

the dielectric substrate further extends between the antenna and the planar surface.

4. (currently amended) The antenna of claim 3, wherein each of the pedestals comprise a generally hexagonal outer configuration.

5. (currently amended) The antenna of claim 4 wherein the antenna comprises a ~~fractal antenna having a~~ generally triangular outer configuration.

6. (original) The antenna of claim 1, wherein a thickness of the dielectric substrate is less than one-half wavelength of a signal input to the antenna.

7. (original) The antenna of claim 1, wherein the dielectric substrate comprises a permeability (μ) that is in the range of between about one and about one hundred.

8. (original) The antenna of claim 1, wherein the dielectric substrate comprises a permittivity (ϵ) that is in the range of between about one and about one hundred.

9. (canceled)

10. (currently amended) The antenna of claim [[9]]1, wherein the ferrimagnetic material comprises magnesium ferrite.